- interface means for providing said library available to the electronic device directly

from said accessory (i.e. "download of the accessory interface software code from

accessory interface memory 118 in external accessory 102 to interface upload memory

106 in mobile station 100," page 6 lines 26-30).

Per claim 4:

Blow further discloses:

- an interface management module for downloading said library to the electronic device

(i.e. control routines, page 6 lines 35-39).

Per claim 5:

Blow further discloses:

- said library and said application programming interface providing a connection between

said accessory and an application loaded to the electronic device (page 6 lines 30-32).

Per claim 6:

Blow further discloses:

- said interface comprising detection means for detecting an attachment of the accessory

to the electronic device (i.e. "attach detector 110," page 4 lines 3-11).

Per claim 10:

Blow further discloses:

- means for making said application programming interface available for at least one application loaded to the electronic device before starting the execution of said application (i.e. the accessory interface software …may contain the algorithms for controlling the volume of the auxiliary speaker," page 6 lines 30-35).

Per claim 11:

Blow discloses:

- An accessory comprising a library for enabling an electronic device to use the accessory (i.e. "Accessory interface memory 118 contains the interface software needed for the mobile station 100 to functionally interact with the specific external accessory 102," page 6 lines 6-10)

- and an interface for providing a connection with said electronic device (i.e. "attachment of the external accessory 102 through interface 112," page 4, lines 4-5).

Per claim 12:

Blow further discloses:

- a functionality that is usable for applications on said electronic device (i.e. "Accessory interface memory 118 contains the interface software needed for the mobile station 100 to functionally interact with the specific external accessory 102," page 6 lines 6-10).

Per claims 13-14, they are the accessory versions of claims 2-3, respectively, and are

rejected for the same reasons set forth in connection with the rejection of claims 2-3 above.

Per claims 19-21, they are the system versions of claims 1-3 , respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1-3 above.

Per claims 22-26, they are the method versions of claims 1-6, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1-6 above.

Per claim 27:

Blow further discloses:

- downloading said library from the accessory to the mobile communication device when the attachment of the accessory is detected (i.e. page 4, lines 3-11).

Per claims 28 and 32, they are the method versions of claims 5 and10, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 5 and 10 above.

Per claim 33, it is the program product version of claim 1, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 1 above.

Per claim 34:

Blow discloses:

- A method for providing accessing an accessory of an electronic device, the method

comprising storing a library to the accessory for enabling said electronic device to use the

accessory (i.e. "mobile station controller 108 writes the accessory interface software into

interface upload memory 106, where it is temporarily stored," page 6 lines 12-17).

- providing a connection between said electronic device and said accessory (i.e.

"attachment of the external accessory 102 through interface 112," page 4, lines 4-5)

- providing said library available to the electronic device (i.e. "Accessory interface

memory 118 contains the interface software needed for the mobile station 100 to

functionally interact with the specific external accessory 102," page 6 lines 6-10).

Per claim 35, it is the method version of claim 2, respectively, and is rejected for the

same reasons set forth in connection with the rejection of claim 2 above.

Claim Rejections - 35 USC § 103

11.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

12.   Claims 7, 8, 29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Blow (WO 99/53621, published on 10/21/1999) in view of Isberg et al. (US Patent 6,201,975)

hereafter Isberg.

Per claim 7:

Blow teaches an attach detector that detects the physical connection of mobile station to

external accessory by detecting a transition in current (i.e. page 4, lines 8-11). Blow does not

explicitly teach detection means for detecting a detachment of the accessory from the electronic

device. However, Isberg teaches such a detachment detector was known in the pertinent art, at

the time applicant's invention was made, to release the connection to the accessory unit (i.e. col.

1 lines 60-65). It would have been obvious for one having ordinary skill in the art to modify

Blow's disclosed system to incorporate the teachings of Isberg. The modification would be

obvious because one having ordinary skill in the art would be motivated to detect the detachment

of the accessory to disable the connection between the two devices and release memory space

used to accommodate any code for the accessory unit as suggested by Isberg (i.e. co. 1 lines 60-

65).

Per claim 8:

Isberg further discloses:

- an interface management module for disabling a connection between an application

    loaded to the electronic device and said library when the detachment of the accessory

    is detected (i.e. co. 1 lines 60-65).

Per claims 29 and 30, they are the method versions of claims 7 and 8, respectively, and

are rejected for the same reasons set forth in connection with the rejection of claims 7 and

8 above.

13.   Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blow (WO

99/53621, published on 10/21/1999) in view of Chu et al. (US Pg. Pub. 2005/0003810) hereafter

Chu.

Per claim 15:

Blow discloses interface software needed for the mobile station to functionally interact

with the specific external accessory (i.e. page 6 lines 6-10). Blow does not explicitly teach the

interface software is written in a language such as Java, C, C++, C#, or Visual basic. However,

Chu teaches that writing interface code in a language such as Java was known in the pertinent

art, at the time applicant's invention was made, to provide flexibility, robustness, and portability

etc (i.e. page 3, 0036; 0048). It would have been obvious for one having ordinary skill in the art

to modify Blow's disclosed system to incorporate the teachings of Chu. The modification would

be obvious because one having ordinary skill in the art would be motivated to provide a high-

level portable code as suggested by Chu.

14.   Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blow

(WO 99/53621, published on 10/21/1999) in view of Wendelrup et al. (WO 02/102035 A2,

published on 12/19/2002) hereafter Wendelrup.

Per claims 16 and 17:

Blow does not explicitly teach indicating the attachment and detachment of the accessory to the electronic device. However, Wendelrup teaches displaying such a status indication to the electronic device was known in the pertinent art, at the time applicant's invention was made, to indicate the accessory status information to the user (i.e. page 2, lines 23-32; page 7, lines 12-17). It would have been obvious for one having ordinary skill in the art to modify Blow's disclosed system to incorporate the teachings of Wendelrup. The modification would be obvious because one having ordinary skill in the art would be motivated to indicate the attachment and detachment of the accessory device to the electronic device to the user as suggested by Wendelrup.

15.   Claims 9, 18, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blow (WO 99/53621, published on 10/21/1999) in view of Applicant's Admitted Prior Art (hereinafter referred to as "APA") disclosed in the background section of the instant application.

Per claim 9:

Blow discloses the "accessory specific interface software being stored in the external accessory itself (page 2, lines 19-20)." Blow does not explicitly teach that the accessory further comprising at least one application to be loaded to the electronic device. However, APA teaches downloading of application software stored on an accessory device to a mobile device was known in the pertinent art, at the time applicant's invention was made, to download a desired

application of the accessory device to the electronic device (i.e. page 3 lines 16-18). It would

have been obvious for one having ordinary skill in the art to modify Blow's disclosed system to

incorporate the teachings of APA. The modification would be obvious because one having

ordinary skill in the art would be motivated to download any desired application stored on the

external accessory device.

Per claims 18 and 31, they are the accessory and method versions of claim 9 respectively,

and are rejected for the same reasons set forth in connection with the rejection of claim 9

above.

16.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Insun Kang whose telephone number is 571-272-3724. The

examiner can normally be reached on M-R 6:30-5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, MENG AI AN can be reached on 571-272-3756. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300. Information

regarding the status of an application may be obtained from the Patent Application Information

Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available

through Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the

Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from

a USPTO Customer Service Representative or access to the automated information system, call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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**MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100**